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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,772	01/17/2002	Young-Ki Kim	6192.0249.AA	2680

7590 03/22/2004  
McGuire Woods  
Suite 1800  
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McLean, VA 22102-4215

EXAMINER

NGUYEN, JENNIFER T

ART UNIT PAPER NUMBER

2674

DATE MAILED: 03/22/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/046,772

Applicant(s)

KIM, YOUNG-KI

Examiner

Jennifer T Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office action is responsive to amendment filed on 01/09/2004.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeong et al. (U.S. Patent No. 6,271,816).

Regarding claim 1, referring to Figs. 1A, 2C, and 2G, Jeong teaches a liquid crystal display, comprising: a liquid crystal panel including a plurality of gate lines (R0, R1), a plurality of insulated data lines (C0, C1) crossing the gate lines (R0, R1), and a plurality of first thin film transistors (106) each having a gate electrode connected to a gate line (R0) and a source electrode connected to a data line (C0); a gate driver (102) for sequentially supplying a gate-on voltage to the gate lines (R0, R1) for turning on the thin film transistors (106); a data driver (104) for applying a data voltage to the data lines (C0, C1); a data line sharing switch having a plurality of switching devices (112), each of which formed between the adjacent data lines (C0, C1) to connect and disconnect the adjacent data lines (C0, C1); and a sharing signal generator for outputting a sharing control signal (i.e., neutralizer enable) for turning on the switching devices (112), wherein the data line sharing switch (272) (Fig. 2G) is placed at one end of the liquid

Art Unit: 2674

crystal panel opposite to the data driver (104) (Fig. 2G) (col. 1, lines 10-67, col. 5, lines 1-67, and col. 6, lines 1-31).

Regarding claim 2, Jeong further teaches the data line sharing switch is formed on the liquid crystal panel (col. 1, lines 16-67 and col. 6, lines 24-31).

Regarding claim 3, Jeong also teaches that the switching devices (112) are second thin film transistors (col. 5, lines 35-36).

Regarding claim 4, Jeong teaches the second thin film transistors (112) are manufactured by the same process as the first thin film transistor (106) (Fig. 1A, col. 5, lines 1-67, col. 6, lines 1-31).

Regarding claim 6, Jeong further teaches the sharing signal generator applies a sharing signal pulse (i.e., neutralizer enable) for sharing the data lines (C0, C1) between the gate-on voltages applied to adjacent gate lines respectively (col. 5, lines 1-67, col. 6, lines 1-31).

Regarding claim 7, Jeong teaches the sharing signal generator applies a sharing signal pulse for sharing the data lines (C0, C1) after the voltage applied to the previous gate line turns to a gate-off voltage (col. 5, lines 1-67, col. 6, lines 1-31).

4. Claim 8 is allowed.

#### ***Response to Arguments***

5. Applicants' arguments filed 01/09/2004, have been fully considered but they are not persuasive because as follows:

In response to applicants' argument filed "Jeong fails to teach or suggest the data line sharing switch is place at one end of the liquid crystal panel opposite to the data driver and the adjacent data lines are connected after the voltage applied to a previous gate line is changed to a

Art Unit: 2674

gate-off voltage, and the adjacent data lines are disconnected in a predetermined time after the gate-on voltage is applied to the gate line". However, Jeong teaches the data line sharing switch (272) is place at one end of the liquid crystal panel opposite to the data driver (104, 105) (Fig. 2G). Therefore, it is believed that the claim limitations are still met by Jeong the rejection is still maintained.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

**Any response to this action should be mailed to:**

Art Unit: 2674

Commissioner of Patents and Trademarks

Washington, DC. 20231

**Or faxed to: 703-872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is 703-306-0377.

JNguyen  
03/16/2004

  
REGINA LIANG  
PRIMARY EXAMINER